

510(k) SUMMARY OF SAFETY AND EFFECTIVENESSK022377
page 1 of 2***The Trabecular Metal Glenoid
Bigliani/Flatow® (B/F) The Complete Shoulder Solution***

Submitter Name And Address: Implex Corp.
80 Commerce Drive
Allendale, New Jersey 07401-1600

Contact Person: Robert A Poggie, PhD

Phone Number: (201) 818-1800 X 519

Fax Number: (973) 829-0825

Date Prepared: November 19, 2002

Device Trade Name: The Trabecular Metal Glenoid, the B/F Complete Shoulder Solution

Device Common Name: Glenoid Component

Classification Number and Name: 21 CFR 888.3660 & 888.3650; Prosthesis, shoulder, semi & non-constrained, metal/polymer cemented.

DEC 10 2002

**Substantial
Equivalence:**

The term "substantial equivalence" as used in this 510(k) notification is limited to the definition of substantial equivalence found in the Federal Food, Drug and Cosmetic Act, as amended and as applied under 21 CFR 807, Subpart E under which a device can be marketed without premarket approval or reclassification. A determination of substantial equivalency under this notification is not intended to have any bearing whatsoever on the resolution of patent infringement suits or any other patent matters. No statements related to, or in support of substantial equivalence herein shall be construed as an admission against interest under the US Patent Laws or their application by the courts.

**Device
Description:**

This new implant device is a monoblock glenoid component comprised of a Trabecular Metal base with an articular surface comprised of direct compression molded polyethylene. The resulting implant, the Trabecular Metal Glenoid, is designed to interface & articulate with Zimmer B/F humeral components. The subject device is available in one thickness option of 5 mm, and the same outer profile options as the B/F all-polyethylene glenoid. The range of outer profile options include 40, 46, and 52 mm round shapes, and 40 by 46 mm, 46 by 52 mm, and 52 by 56 mm oval shapes.

510(k) Summary (Continued)

Indications for Use:	Prosthetic replacement with this device may be indicated for the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint; un-united humeral head fractures of long duration; irreducible 3- and 4-part proximal humeral fractures; avascular necrosis of the humeral head; or other difficult clinical management problems where arthrodesis or resectional arthroplasty is not acceptable. The assembled humeral component may be used alone for hemiarthroplasty or combined with the glenoid component for total shoulder arthroplasty. Humeral heads with heights greater than 27 mm may be used for difficult clinical management problems involving rotator cuff deficiency where arthrodesis or conventional non-constrained arthroplasty is not acceptable. The Trabecular Metal Glenoid must be cemented in place in the USA.
Device Technological Characteristics & Comparison to Predicate Device:	The subject device possesses the same articulation geometry, minimum polyethylene thickness and outer profile options as the predicate B/F all-poly glenoid components. The Trabecular Metal, direct compression molded polyethylene and monoblock design is similar to numerous cleared Implex devices.
Performance Data:	Performance data for the UHMPWE and Hedrocel Trabecular Metal interface can be found in Implex MAF #920, and for the articulating surface geometry in K982981.
Conclusion:	The Trabecular Metal Glenoid is substantially equivalent to the identified predicate devices identified in this premarket notification based on the similarity in technological characteristics and indications for use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

DEC 10 2002

Mr. Robert A. Poggie, PhD
Director of Applied Research
Implex Corp.
80 Commerce Drive
Allendale, New Jersey 07401-1600

Re: K022377

Trade/Device Name: The Trabecular Metal Glenoid – Bigliani/Flatow®, The Complete
Shoulder Solution

Regulation Number: 21 CFR §888.3660 and §888.3650

Regulation Name: Shoulder Joint metal/polymer semi-constrained cemented prosthesis;
Shoulder joint metal/polymer non-constrained cemented prosthesis

Regulatory Class: Class II

Product Code: KWS and KWT

Dated: October 25, 2002

Received: October 28, 2002

Dear Dr. Poggie;

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

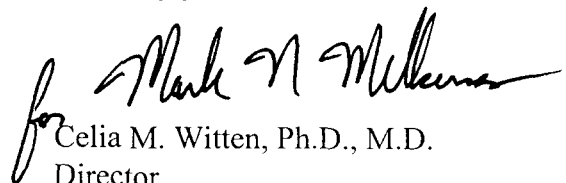
Page 2 – Dr. Robert A. Poggie

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,


for Celia M. Witten, Ph.D., M.D.
Director

Division of General, Restorative
and Neurological Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

510(k) Number (if known):

K022377

page 1 of 1

Device Name:

The Trabecular Metal Glenoid – The B/F Complete Shoulder Solution

Indications For Use:

Prosthetic replacement with this device may be indicated for the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint; un-united humeral head fractures of long duration; irreducible 3- and 4-part proximal humeral fractures; avascular necrosis of the humeral head; or other difficult clinical management problems where arthrodesis or resectional arthroplasty is not acceptable. The assembled humeral component may be used alone for hemiarthroplasty or combined with the glenoid component for total shoulder arthroplasty. Humeral heads with heights greater than 27 mm may be used for difficult clinical management problems involving rotator cuff deficiency where arthrodesis or conventional non-constrained arthroplasty is not acceptable. The Trabecular Metal Glenoid must be cemented in place in the USA.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH; Office of Device Evaluation (ODE)

for Mark N. Miller
(Division Sign-Off)

Division of General Restorative
and Neurological Devices

K022377

Prescription Use
(Per 21 CFR 801.109)

OR...

510(k) Number _____
Over-The-Counter Use _____

(Optional Format 1-2-96)